AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method for ~~sizing~~ determining the size of a crack in a workpiece, more specifically the depth of a crack in said workpiece, using the ultrasonic pulse-echo method, said method involving the following method steps:

[[-]] a workpiece ~~has~~ is chosen having a front face and a back face, wherein the workpiece ~~has~~ exhibits a crack ~~that takes departure~~ starting at the back face,

[[-]] an angle beam probe is placed on the front face, [[it]] the angle beam probe sends ultrasonic pulses at an angle alpha into the workpiece and receives echo signals of said pulses,

[[-]] the angle beam probe is moved at least once ~~across~~ over the crack so that the radiation beam of the angle beam probe sweeps across the entire crack,

[[-]] the received echo signals are digitalized and stored in a memory as pairs of ~~values~~ echo signal values over travel time, whereby ~~with~~ the stored pairs of values ~~forming a quantity that is limited toward the top by an envelope curve~~ form a multitude and an envelope curve is constructed of this multitude, wherein for the construction of the envelope curve the high values of the stored pairs are used,

[[-]] the size of the crack is calculated from the width of the envelope curve at a predetermined partial amplitude and from the maximum amplitude of the envelope curve.

2. (Currently amended) The method as set forth in claim 1, ~~characterized in that, for every single value of the travel time of~~ wherein several echo

amplitudes are obtained for an individual value of the travel time, and wherein only the echo amplitude having the highest value is stored.

3. (Currently amended) The method as set forth in claim 1, ~~characterized in that~~ wherein the size of the crack is proportional to the product of the maximum amplitude of the envelope curve and the width of the envelope curve at 50% of the maximum amplitude.

4. (Currently amended) The method as set forth in claim 1, ~~characterized in that~~ wherein the angle beam probe is a component part of an ultrasonic inspection apparatus, ~~that~~ wherein said ultrasonic inspection apparatus further comprises a computer module and ~~that~~ wherein said computer module outputs an output value representing a ~~the~~ flaw size ~~as a value~~.

5. (Currently amended) The method as set forth in claim 1, ~~characterized in that~~ wherein the angle beam probe is moved several times across the crack~~, preferably back and forth~~.

6. (Currently amended) A device for carrying out the method as set forth in claim 1 for determining ~~(value measuring)~~ a crack in a workpiece using the ultrasonic pulse-echo technique, said device comprising:

[[-]] an angle beam probe ~~that is~~ being a component part of an ultrasonic inspection apparatus which ultrasonic inspection apparatus is further comprised of the following parts:

- a) a transmitter module and a receiver module,
- b) an ~~A-D~~ A/D (analog-digital) converter that is connected downstream of the receiver module,
- c) a memory ~~that stores in the form of pairs of~~ for storing values echo signals which values echo signals are in the form of pairs and are received from the transmitter module and are digitalized by the ~~A-D~~ A/D converter together with the respective travel time, only the highest echo amplitude obtained being stored for every ~~single~~ individual travel time and
- d) a computer module ~~that computes~~ for computing the depth of the crack ~~from~~ out of the maximum amplitude stored and from a width dimension of the envelope curve as stored.

7. (Currently amended) The device as set forth in claim 6, ~~characterized in that~~ wherein the ultrasonic apparatus comprises a monitor for displaying the envelope curve.

8. (New) The method as set forth in claim 1, wherein the angle beam probe is moved several times back and forth over the crack.

9. (New) A method for determining the depth of a crack in a workpiece, using the so-called ultrasonic pulse-echo method, said method involving the following steps:

a workpiece is chosen having a front face and a back face, wherein the workpiece exhibits a crack starting at the back face,

an angle beam probe is placed on the front face, the angle beam probe sends ultrasonic pulses at an angle alpha into the workpiece and receives echo signals of said pulses,

the angle beam probe is moved at least once over the crack so that the radiation beam of the angle beam probe sweeps across the entire crack, the received echo signals are digitalized and stored in a memory as pairs of echo signal values over travel time, whereby the stored pairs of values form a multitude and an envelope curve is constructed, wherein for the construction of the envelope curve the high values of the stored pairs are used,

the size of the crack is calculated from the width of the envelope curve at a predetermined partial amplitude and from the maximum amplitude of the envelope curve.